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199—35.2(476) Definitions. The following words and terms, when used in this chapter, shall have the meanings shown below:

"Annual Iowa retail rate revenue" means the utility's expected revenue forecast based on customer growth rate, usage per customer, volumes, margin rate, customer charge rate, and the cost of generation or fuel.

"Assessment of potential" means development of cost-effective energy and capacity savings available from actual and projected customer usage by applying commercially available technology and improved operating practices to energy-using equipment and buildings and considering market factors including, but not limited to, the effects of rate impacts, the need to capture lost opportunities, the non-energy benefits of measures, and the strategic value of energy efficiency and demand response to the utility.

"Avoided cost" means the cost the utility would have to pay to provide energy and capacity from alternative sources of supply available to utilities as calculated pursuant to subparagraphs 35.5(4) "m" (7) and 35.5(4) "n" (4).

"Cost-effectiveness tests" means one of the five acceptable economic tests used to compare the present value of applicable benefits to the present value of applicable costs of an energy efficiency or demand response program or plan. The tests are the participant test, the ratepayer impact test, the societal test, the total resource cost test, and the utility cost test. A program or plan passes a cost-effectiveness test if the cost-effectiveness ratio is equal to or greater than one.

"Customer incentive" means an amount or amounts provided to or on behalf of customers for the purpose of having customers participate in energy efficiency programs. Incentives include, but are not limited to, rebates, loan subsidies, payments to dealers, rate credits, bill credits, the cost of energy audits, the cost of equipment given to customers, and the cost of installing such equipment. Customer incentives do not include the cost of information provided by the utility, nor do they include customers' bill reductions associated with reduced energy usage due to the implementation of energy efficiency programs. For the purposes of energy efficiency pricing strategies, "incentive" means the difference between a customer's bill on an energy efficiency customized rate and the customer's bill on a traditional rate considering factors such as the elasticity of demand.

"Demand response" means changes in a customer's consumption pattern in response to changes in the price of electricity over time, or in response to incentive payments to induce reduced consumption during periods of high wholesale prices or when system reliability is jeopardized.

"Economic potential" means the energy and capacity savings that result in future years when measures are adopted or applied by customers at the time it is economical to do so. For purposes of this chapter, economic potential may be determined by comparing the utility's avoided cost savings to the incremental cost of the measure.

"Energy efficiency measures" means activities on the customers' side of the meter which reduce customers' energy use or demand including, but not limited to, end-use efficiency improvements or pricing strategies.

"Energy savings performance standards" means those standards which shall be cost-effectively achieved, with the exception of programs for qualified low-income persons, tree-planting programs, educational programs, and assessments of consumers' needs for information to make effective choices regarding energy use and energy efficiency, and includes the annual capacity savings stated either in kilowatt per day (kW/day) or in dekatherm per day (dth/day) or in thousand cubic feet per day (Mcf/day) and the annual energy savings stated in either kilowatt hour (kWh) or dth or Mcf.

"Free riders" means program participants who would have implemented energy efficiency measures or practices even without the program.

"Marginal energy cost" means the cost associated with supplying the next Mcf or dth of natural gas for a natural gas utility and the energy or fuel cost associated with generating or purchasing the next kWh of electricity for an electric utility.

"Market effects" means a change in the structure of a market or the behavior of participants in a market that is reflective of an increase (or decrease) in the adoption of energy-efficient products, services, or practices and is related to market intervention(s) (e.g., programs).

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"Net benefits" means the present value of benefits less the present value of costs as defined in the cost-effectiveness test.

"Non-energy benefits" means the many and diverse benefits produced by energy efficiency in addition to energy and demand savings as used and applied in the Iowa Technical Reference Manual. The beneficiaries of these benefits can be utility systems, participants and society.

"Participant test" means an economic test used to compare the present value of benefits to the present value of costs over the useful life of an energy efficiency or demand response measure or program from the participant's perspective. Present values are calculated using a discount rate appropriate to the class of customers to which the energy efficiency or demand response measure or program is targeted. Benefits are the sum of the present values of the customers' bill reductions, tax credits, non-energy benefits and customer incentives for each year of the useful life of an energy efficiency or demand response measure or program. Costs are the sum of present values of the customer participation costs (including initial capital costs, ongoing operations and maintenance costs, removal costs less a salvage value of existing equipment, and the value of the customer's time in arranging installation, if significant) and any resulting bill increases for each year of the useful life of the measure or program. The calculation of bill increases and decreases must account for any time-differentiated rates to the customer or class of customers being analyzed.

"Persistence of energy savings" means the savings due to changed operating hours, human behavior, interactive factors, and the degradation in equipment efficiency over the life of the measure compared to the baseline.

"Process-oriented industrial assessment" means an analysis which promotes the adoption of energy efficiency measures by examining the facilities, operations and equipment of an industrial customer in which energy efficiency opportunities may be embedded.

"Ratepayer impact test" means an economic test used to compare the present value of the benefits to the present value of the costs over the useful life of an energy efficiency or demand response measure or program from a rate level or utility bill perspective. Present values are calculated using the utility's discount rate. Benefits are the sum of the present values of utility avoided capacity and energy costs (excluding the externality factor) and any revenue gains due to the energy efficiency or demand response measure or program for each year of the useful life of the measure or program. Costs are the sum of the present values of utility increased supply costs, revenue losses due to the energy efficiency or demand response measures, utility program costs, and customer incentives for each year of the useful life of the measure or program. The calculation of utility avoided capacity and energy, increased utility supply costs, and revenue gains and losses must use the utility costing periods.

"Societal test" means an economic test used to compare the present value of the benefits to the present value of the costs over the useful life of an energy efficiency or demand response measure or program from a societal perspective. Present values are calculated using a 12-month average of the 10-year and 30-year Treasury Bond rate as the discount rate. The average shall be calculated using the most recent 12 months at the time the utility calculates its cost-effectiveness tests for its energy efficiency or demand response plan. Benefits are the sum of the present values of the utility avoided supply, non-energy benefits, and energy costs including the effects of externalities. Costs are the sum of the present values of utility program costs (excluding customer incentives), participant costs, and any increased utility supply costs for each year of the useful life of the measure or program. The calculation of utility avoided capacity and energy and increased utility supply costs must use the utility costing periods.

"Spillover (free drivers)" means the reduction in energy consumption or demand, or the reduction in both, caused by the presence of an energy efficiency or demand response program, beyond the program-related gross savings of the participants and without financial or technical assistance from the program. The term "free drivers" may be used for individuals who have spillover effects.

"Take-back effect" means a tendency to increase energy use in a facility, or for an appliance, as a result of increased efficiency of energy use. For example, a customer's installation of high-efficiency light bulbs and the subsequent longer operation of lights constitutes "taking back" some of the energy otherwise saved by the efficient lighting.

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"Total resource cost test" means an economic test used to compare the present value of the benefits to the present value of the costs over the useful life of an energy efficiency or demand response measure or program from a resource perspective. Present values are calculated using a 12-month average of the 10-year and 30-year Treasury Bond rate as the discount rate. The average shall be calculated using the most recent 12 months at the time the utility calculates its cost-effectiveness tests for its energy efficiency or demand response plan. Benefits are the sum of the present values of the utility avoided supply, energy costs, non-energy benefits, and federal tax credits. Costs are the sum of the present values of utility program costs (excluding customer incentives), participant costs, and any increased utility supply costs for each year of the useful life of the measure or program. The calculation of utility avoided capacity and energy and increased utility supply costs must use the utility costing periods.

"Useful life" means the number of years an energy efficiency measure will produce benefits.

"Utility cost test" means an economic test used to compare the present value of the benefits to the present value of the costs over the useful life of an energy efficiency or demand response measure or program from the utility revenue requirement perspective. Present values are calculated using the utility's discount rate. Benefits are the sum of the present values of each year's utility avoided capacity, non-energy benefits, and energy costs (excluding the externality factor) over the useful life of the measure or program. Costs are the sum of the present values of the utility's program costs, customer incentives, and any increased utility supply costs for each year of the useful life of the measure or program. The calculation of utility avoided capacity and energy and increased utility supply costs must use the utility costing periods.

[ARC 4709C, IAB 10/9/19, effective 11/13/19]